FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.

10. The State has two contradictory policies on State agencies and departments purchasing goods and services from Correction Enterprises.	• Clarify the State policies on purchases from Correction Enterprises through the following:
	
	  • Develop a policy that addresses the appropriate size, capacity, and potential benefits to prisoner rehabilitation
	
	  • Develop a policy that clearly specifies when State agencies and departments should purchase from Correction Enterprises
		• Provides management information on the manufacturing of goods and provision of services by Correction Enterprises.	3.26

11. The Staff resources used to develop product standards should be redirected to more productive use.	• Improve the effectiveness of the standard engineers through the following:
	
	  • Establish a program for the prioritization of commodities needing development of specification standards
	
	  • Evaluate the adoption of standards that have been already developed
	
	  • Evaluate the need to reassign standards engineers
		• Maximizes the benefits of standardization and enables the State to expand the number of commodities covered by specification standards.	3.28

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.

12. The Purchase and Contracts Division is not provided clear authority to perform oversight reviews of purchase activities of State agencies and departments to ensure adherence to procurement policies and procedures.	▪ Improve the oversight of State procurement practices through the following:
	
	  ▪ The Department of Administration should provide a clear mandate to the Purchase and Contracts Division
	
	  ▪ The Purchase and Contracts Division should establish a program for oversight reviews of departments and agencies
		▪ Enables Purchase and Contracts Division to perform oversight reviews of procurement practices of departments and agencies.
		
		▪ Ensures compliance with policies and procedures and identifies opportunities for improvements in procurement practices.
			3.29

13. Purchasing procedures are out of date and incomplete.	▪ Improve the utility of the State Purchasing Manual for procurement staff in the Division of Purchase and Contracts and purchasing staff in departments and agencies by:
	
	  ▪ Update the State Purchasing Manual
	
	  ▪ Provide guidance on informal purchasing policies to agencies
	
	  ▪ Develop a buyers' code of ethics
	
	  ▪ Establish policies and procedures for handling of bid protests
			3.35

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.

14. State agencies lack useful information on available surplus property and incentives are lacking for agencies to report surplus property.	• Enhance the use of surplus property by State agencies and departments:
	
	  • The surplus property sections should develop an on-line inventory management system
	
	  • State agencies should be provided direct reimbursement for proceeds from sale of surplus property
		• State agencies would be able to easily access the system and identify usable surplus.	3.37

15. The State lacks a well-targeted program for meeting its contracting goals with minority-owned, women-owned, and disabled-owned businesses.	• The State should have a more aggressive program on contracting with minority-owned, women-owned, and disabled-owned business firms to meet its legislatively and executively mandated program goals:
	
	  • Publicize the central contact point for minority business
	
	  • Hold outreach programs
		• Encourages minority-owned, women-owned, and disabled-owned businesses to conduct business with the State.	3.38

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
1. The ITC has not been effective in its oversight of technology.	• Restructure governance of technology to provide clear-cut accountability and a well-defined chain of command: • Establish an Information Resource Management Commission (IRMC) to replace existing Information Technology Commission. • Designate the Deputy Controller for Information Resource Management to be the Chief Information Officer. • Establish an Information Resource Management Advisory Board to link agency programs, technology plans, and service delivery needs.	• Coordinates the executive agency technology plans and budgets, statewide technology strategies and policies, and material expenditures. *(The General Assembly enacted legislation establishing IRMC in the 1992 session.)*	3.3
3. IRM reports to an Assistant Secretary in most agencies.	• Establish supervision of the IRM at either the Secretary or Deputy Secretary level of each agency.	• The agency may be better organized to coordinate information technology initiatives across its divisions and programs. • More valuable uses of information technology may be found for more programs.	3.7
4. Major appropriation requests for information technology often are not well managed.	• The IRMC should establish minimum standards for all appropriation requests to the General Assembly for information technology funding.	• Improves the decision making process on funding for information technology.	3.8

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
5. North Carolina is affected adversely by long-term technology projects losing funding midstream.	▪ The General Assembly should develop a process for multi-year funding of technology projects.	▪ Improves the potential to successfully complete long-term projects.	3.9
6. Agency spending on information technology often appears to be inadequately managed.	▪ The IRMC should establish procedures for purchasing and should approve significant technology expenditures.	▪ Reduces inappropriate or ineffective procurements.	3.10
7. Consolidated financial information about agency technology efforts and assets is not readily available.	▪ Appropriate technology funds at the department level and require the IRM manager to report quarterly on agency technology expenditures and activities.	▪ Facilitates the collection of agency-wide expenditures on technology.	3.11
8. There is no independent reporting on project status and results.	▪ The IRMC should institute a quality review program to monitor the progress of major/critical technology projects. ▪ The IRMC should temporarily freeze appropriated project funds if the project is at risk and agency management has not committed to taking corrective action to resolve the issue.	▪ Reduces the risk of projects failing to achieve intended results.	3.12

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
9. State management's discussions about SIPS's finances are often filled with miscommunication that inhibits effective decisions.	• Establish standard financial terminology and statistics regarding technology resources to facilitate effective management.	• Improves the quality and timeliness of management decisions based on financial aspects of information technology.	3.14
10. The IRMC has to deal with the issue of agencies going outside of SIPS for data processing.	• The IRMC should establish a policy regarding agencies using alternative processing sources to SIPS.	• Positions the State to get the greatest value from its expenditures for information processing.	3.15
11. The planning process for technology is ineffective, uncoordinated, and not integrated.	• Modify the planning process at the agency level to link technology plans to program objectives. • Reconstruct the planning process at the statewide level. • Planning documents should be made more specific and more detailed.	• Enables the State to achieve more economical and more effective integration of systems across agencies and potentially across branches.	3.16
12. Current conditions of information technology vary widely among the agencies and some are detrimental to the State.	• The agencies facing operational risks should immediately prepare plans and assess the value of greater investments to reduce and eventually eliminate these risks.	• Reduces the risk of interruptions in State operations caused by systems problems.	3.20

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
13. Technical experts on agency IRM staffs tend to be underutilized.	• Organize technical experts centrally to share transferrable skills across agencies.	• Raises productivity of affected technical staff while enriching their jobs.	3.23
14. Personal computer (PC) usage among the agencies is at a modest overall level. However, PC cost, distribution, and utilization are not well controlled.	• Require an agency to submit its PC utilization plan to the IRM Office as a precondition for authorizing the purchase of PCs.	• Makes utilization of the growing number of PC's in the agencies more cost effective.	3.26
15. Agencies often fail to use the competitive process to procure cost-effective solutions to their information technology needs.	• Eliminate directed sole-source procurements, and establish a statewide standard for competitive procurement of technology products.	• Establishes competitive procurement as the standard means for acquiring technology products at favorable cost.	3.27
17. The agencies do not exercise effective quality assurance (QA) functions.	• Implement a statewide quality assurance program to ensure the prudent management of major investments in information technology.	• Ensures the prudent management of major investments in information technology.	3.30

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
18. SIPS and the IRM divisions in most cases have not provided adequate training and tools to technical staff.	• All agencies should invest in an ongoing program of appropriate training and tools for technical staff.	• Ensures that all technical staff are enabled to be productive.	3.31
19. North Carolina does not have adequate disaster recovery capability for its data centers nor for its mission critical applications.	• North Carolina should immediately reduce its exposure to prolonged disruption of its operations from potential data center disasters.	• Reduces the risk of prolonged disruption of business operations caused by major problems at the data centers.	3.33
20. Data security measures in effect among the agencies are generally not adequate to provide appropriate protection for sensitive data.	• Raise the statewide level of data security policies and procedures to protect the integrity and confidentiality of sensitive data.	• Ensures data integrity and prevents unauthorized access to sensitive data.	3.35
22. Management of telecommunications is not well organized across the agencies.	• The organization structure of telecommunications management should be formalized across the agencies. • The responsibilities for telecommunications management should be clearly assigned between STS and the agencies.	• Facilitates responsible management of telecommunications at the agency level.	3.38

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
24. SIPS's published plans for the State's telecommunications operation and information technology initiatives are insufficient.	• STS should prepare an annual telecommunications plan in a rigorous, standardized format. • STS should prepare a strategic long-range plan for State telecommunications. • SIPS should enhance its information technology planning process.	• Effective planning will enable SIPS to enhance its overall value to the State.	3.43
25. North Carolina's telecommunications needs are poised for rapid growth.	• STS should proceed with its current planning for band width on demand.	• Potential savings of $10 million to $20 million versus alternative approaches.	3.45
26. Several video pilot projects will create additional network costs for the State.	• The State should begin to determine whether it will support these pilot projects after the grants expire.	• Allows the State to independently assess each pilot project before committing funds.	3.46
27. The State operates multiple telecommunications networks.	• The State should plan and implement some beneficial consolidation of these networks.	• Reduces its direct network costs possibly by as much as 20 percent on affected networks.	3.48
28. The STS's telecommunications disaster recovery plan is not operational at this time.	• STS should enhance the draft telecommunication disaster recovery plan.	• Improves coordination with the SIPS data center disaster recovery plan.	3.50

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
29. SIPS has been operating with a non-responsive and sometimes authoritarian management orientation.	▪ SIPS should proceed to implement fully the customer service orientation that it adopted in its January 1992 reorganization.	▪ Provides effective disaster recovery for the statewide backbone network.	3.52
30. SIPS does not have an effective client relations function.	▪ SIPS should further broaden and strengthen the new client relations function.	▪ Improves customer service.	3.54
31 SIPS has avoided implementing service level agreements.	▪ SIPS should institute client-oriented performance measures and commit to them in service level agreements.	▪ Provides an objective basis to measure quality of service to clients.	3.55
32. SIPS's bills provide insufficient information for agencies to use in managing their costs and resources.	▪ SIPS should simplify the structure of its billing process and the format of its billing reports.	▪ Improves agency's ability to manage its SIPS processing costs.	3.55
33. SIPS's billing rates have been developed informally.	▪ SIPS should formalize its rate setting and review process for computing and telecommunication services.	▪ Improves customer acceptance of billing rates.	3.56
34. SIPS's reserve accumulation will likely impact agencies that obtain federal reimbursements.	▪ The State Controller should work with the affected agencies to anticipate and minimize the adverse impact of this directive and of Circular A-87 in general.	▪ Avoids potential disallowance of costs claimed for reimbursement.	3.58

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
35. SIPS's reserve requirements are increased by its practice of purchasing its mainframe computer.	▪ The Advisory Budget Commission should consider reversing its policy and allowing SIPS to acquire major equipment through a lease-purchase agreement.	▪ Could substantially reduce its billing premium percentage.	3.59
38. The performance analysis and capacity management function at SIPS is not performing all the necessary tasks and is significantly understaffed.	▪ SIPS should define a comprehensive and complete performance analysis and capacity management function and should dedicate adequate resources to it.	▪ Enables SIPS to obtain maximum utilization of its mainframe computer.	3.62
41. Problem reporting and Help Desk activities are fragmented.	▪ SIPS should strengthen and organize its problem reporting.	▪ Reduces lost productivity of users caused by system problems.	3.65
42. SIPS has no internal function responsible to ensure high quality, user-oriented services.	▪ SIPS should establish a quality assurance function.	▪ Ensures the delivery of quality services to SIPS users.	3.66
44. Some production systems at SIPS are not under proper change control.	▪ SIPS should establish a fully functional change management system.	▪ Reduces the likelihood of simple errors not being detected and corrected before a change is implemented.	3.67

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
46. SIPS does not provide adequate back-up support among its systems programmers.	• SIPS should cross train its system programmers to provide more back-up for critical systems products.	• Raises the overall productivity of technical support group.	3.69
48. SIPS has always provided only IBM mainframe solutions while agencies have needed help with Data General and DEC VAX equipment.	• SIPS should provide technical leadership and support in all appropriate technologies.	• Provides technical leadership to the agencies.	3.70
49. SIPS's training services are well received, but are needed on more or newer products.	• SIPS should focus its training where the clients have growing needs.	• Provides training on topics where it is most needed.	3.70
50. SIPS takes no responsibility for the efficiency of agency applications run at its data centers.	• SIPS should set and enforce appropriate technical standards for new applications.	• Leverages the capacity of the mainframe computer.	3.71
51. SIPS has not allocated sufficient resources to provide the type and level of support specified for LANs.	• SIPS should reevaluate its LAN support function to determine the type and level of support it should provide.	• Provides agencies with effective support of LANs.	3.72

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
53. SIPS's programmers and analysts do not have adequate training to successfully develop systems using the new methodology and CASE tools standards.		• Makes technical staff proficient in using current productivity tools.	3.73
55. The data center operated for the departments by the State Computer Center (SCC) has the potential to improve certain aspects of its utilization of resources, based on a comparison with other data centers.		• Allows for better levels of resource utilization.	3.76

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
1. The department has 95 to 100 positions involving excess layers of management, excessively narrow spans of control, overlapping functions, and unnecessary functions.	▪ The 95 to 100 positions involving one-to-one relationships, narrow spans of control, overlapping functions, and unnecessary functions should be eliminated.	▪ The potential annual savings would be $2.9 to $3.0 million. The financial savings over a 10-year period would be $27.4 million.	1.6
2. There are misplaced organizational units within DOT.	▪ The Internal Audit Section, Beautification Program, and the Charlotte IRP Office should report through a revised organization structure to eliminate fragmentation and improve program effectiveness.	▪ Improves DOT's overall effectiveness by moving these units closer to their actual area of responsibility and accountability.	1.9

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
1. Preconstruction has received 555 additional positions or 97 percent of its originally projected staffing need since the HTF program began.	▪ Additional preconstruction staffing needs of NCDOT should be met by increased use of outside contract forces.	▪ The Department will be able to avoid the public sector problems of staffing up and down for varying work loads. ▪ The increased use of outside contractors will enable the Department to adjust its preconstruction and construction activities to match the changing HTF program work load.	2.3
2. Construction has received 146 additional positions or 19 percent of the originally projected staffing need since the HTF program began.	▪ Additional construction staffing needs of NCDOT's HTF program should in part be met by an increasing proportion of outside contract forces.	▪ Private engineering firms will become more familiar with the preconstruction and construction requirements of NCDOT, which will improve the quality of their products and the efficiency of their efforts.	2.4
3. NCDOT's preconstruction units are currently seeking to add 298 more staff to address the HTF work load.			2.4

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
1. NCDOT's 14 divisions are appropriate for the large scope of the Department's road system responsabilities.	• NCDOT should retain the 14-division structure of its field forces.	• The 14-division structure of NCDOT field forces is a reasonable arrangement for ensuring proper management oversight and public accessibility, given the large size of the Department's road and bridge system.	3.7
2. Excessive management layers exist between the Division Engineer position and the county maintenance workers.	• The "district" layer of management within the Division Highway Maintenance sections should be eliminated. * Referred back to sub committee	• This would eliminate 117 positions across the 14 divisions and increase the span of control of the Division Maintenance Engineer position.	3.7
3. The Division Equipment Operations Supervisor position represents a redundant layer of management.	• The Department should eliminate the Division Equipment Operations Supervisor positions in each of the 14 divisions.	• A reasonable span of control will be maintained for the Division Equipment Superintendent position, while eliminating the need for 14 positions.	3.9
4. The Department operates separate Division and county garages in the same geographic areas.	• The Department should consolidate the Equipment section resources associated with the 14 division garages and those 14 NCDOT county garages located nearby.	• Fourteen NCDOT county garages statewide can be closed or consolidated.	3.8

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
5. Equipment maintenance is an integral part of the field support activities of the Department.	• NCDOT should retain control over its non-sedan equipment maintenance functions.	• Maintaining control at NCDOT will ensure timely, responsive vehicle maintenance service to its maintenance, operations, and construction field forces.	3.8
6. Division Traffic Services units lack adequate management focus on signal-related activities.	• Signal-related activities and staff resources should be assigned to the Division Assistant Traffic Engineer, while the pavement marking and signs personnel should continue to report to the Traffic Services Supervisor.	• This will provide for a more balanced distribution of Traffic Services staff among the Traffic Services supervisors.	3.9
7. Potential reductions in division-based staff due to these recommendations will be from 129 to 168 positions.	• Eliminate 129 to 168 positions.	• Eliminating 129 to 168 positions will produce potential savings of $4 to $6 million. The financial savings over a 10-year period would be from $40 to $60 million.	3.9

TRANSPORTATION

Division Maintenance Staffing and Use of Contract Services Assessment

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
1. The Department's maintenance program has grown, in constant 1992 dollars, by about 15 percent since 1981. In the same period, NCDOT maintenance staffing has gone down by 7 percent.	• The Department should maintain its current maintenance staffing and accomplish the increased maintenance program work load through expanded use of outside contract forces.	• The annual maintenance program will be accomplished more efficiently. • In-house maintenance staff can concentrate on backlogged and expanding maintenance needs.	4.12
2. Most of the maintenance program growth has occurred in the Secondary Road Construction program.	• NCDOT should contract out all of the Secondary Road Construction program.	• Competition among private contractors can result in lower costs and increased service levels.	4.13
3. Most Division construction work is performed by outside contractor forces.			4.3
4. Half of the Secondary Road Construction program is performed by in-house Division maintenance forces.			4.7

TRANSPORTATION

Division Maintenance Staffing and Use of Contract Services Assessment

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
5. Most routine maintenance and operations activities continue to be performed by in-house Division forces.	▪ NCDOT should expand its use of municipal agreements to address growing urban operations needs.	▪ Operational responsibility will be closer to the group most impacted by the function while potentially relieving NCDOT of part of the associated costs.	4.13
6. NCDOT's in-house maintenance staff is adequate, provided more outside contract resources are used to address unmet maintenance needs.			4.9

TRANSPORTATION
Highway Trust Fund Investment Strategies

FINDINGS	RECOMMENDATIONS	RESULTS	REPORT PAGE REF.
1. Significant progress has been made in paving unpaved secondary roads.	• The HTF program should be further adjusted to eliminate the requirement to pave all unpaved secondary roads with traffic volume of between 50 and 100 cars per day.	• This will reduce the cost of the Secondary Roads Construction portion of the HTF by $357 million, and reduce the miles of unpaved roads to be repaved by about 6,000 miles.	5.4
2. State budget constraints have resulted in growing deferred maintenance of the State's highway system.	• The General Assembly should amend the HTF program legislation to permit 16 percent of the available funds to be used by NCDOT for maintenance and operations purposes; *increase highway maintenance funding up to $80 million annually to address state maintenance backlog and its growing maintenance needs.*	• This will prevent future shortfalls in highway maintenance funding and prevent premature deterioration of the State's roadway system which can ultimately cost the State $120 million per year in higher costs by the end of the HTF program.	5.4
3. Existing funding sources are inadequate to meet current and future highway maintenance needs.	• The General Assembly should authorize a comprehensive transportation financing study.	• This will ensure that designated revenue sources are properly used to support transportation program priorities in a comprehensive and equitable fashion.	5.8
4. Failure to adequately address NCDOT's growing maintenance backlog will result in premature roadway surface failures, resulting in billions of dollars in unnecessary future road replacement costs.	• The ~~State~~ *General Assembly* should periodically reassess the justification for and financial feasibility of ~~building 4-lane roads within 10 miles of 96 percent of the State's population~~ *the highway trust fund.*	• This will enable the State to adjust the HTF program based on changing financial conditions and highway program priorities.	5.8